

Goals

- ① Provenance
 - ② Prep tech of clay paste
 - ③ Shaping of vessel
 - ④ Inter-site Intra-site variation
 - ⑤ Chronological standardisation of ceramic microstr. features
- Society based → religion, culture etc.

History:

Technique is more than 100 yrs old.

Initial success in study of

Roman coarse wares 2 → first

Also succeeded in studying reconstructing ceramic tech.

↓
especially clay paste prep

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Difficulties observed in the analysis
of fine wares as the grain-shape
were very less, very often less than $30\mu\text{m}$.

Changing Scenario in Ceramic Petrology

A ceramic thin-section was considered
equivalent to a sedimentary rock (1960s)

Accepted the idea that a ceramic thin
section be viewed to understand the
man behind the artefact (late 1970s)

human hand & skill (early 1980s),

the mind of the man behind the
artefact/mental state of the craftsman
(late 1980s)

Developments in Methodology

Oriented towards Simple fabric desc

" " Provenance Analysis
" " dev. text. analyses methods.

Prep. for thin analysis

Define ^{section} Problem.

Select representative sample

mapping of clay source → extremely hard.

Identify geological formation

" of drainage pattern of area

Stages of thin-section study.

bruh...

Microscopic study

Mineralogy → Plain & (crossed polarized
(PPL & XPL) light

Texture: grain shape, size, freq.

degree of sorting, nature of
voids

Orientation of non-plastic inclusions.

↳ ^A weather changes particle size.

Quantifying Ceramic Microstructure

Manual: look are area of grain

Point counting: Single jump, Double jumps
& triple jump: Possibility of error
✓ 2.5%

→ Methew et al 1991

0.5 to 3 mm → size of grain.

both graph → 30% also

Other method: Point counting

Petro-fabric Characterization.

Identify

Mineralogy: Mineralogy

↘ Interpreting:

Sim/diff in paste of diff. wares,

tech. relationships, variety of past^{le} reūp^o.

- related with strategic distribution

Dev. of tech. through time, adaptation

H 1 $1'$ 10000 101 10000000

Through time, responses to wider
cultural change, survival tech.

" " to forms:

Functional diff. in manufacturing,
manipulation of raw materials.

Pre-req: Dev. a methodology:

• Stages in Ceramic Manufacturing
through an Ethnographic Approach

- collecting of clay
- prep. of clay paste
- forming of vessel
- Drying the vessels.

→ amount of water, grains, plasticity.

→ explained tools.

↳ for carving

↳ smooth, grooved
tools to shape.

Tentative inferences on culture:

① Household Prod.

→ low degree of standardisation

② Non-centralised Prod.

Mod degree

③ Industrial Prod

High . . .

⇒ Map of drainage Pattern of Gujarat